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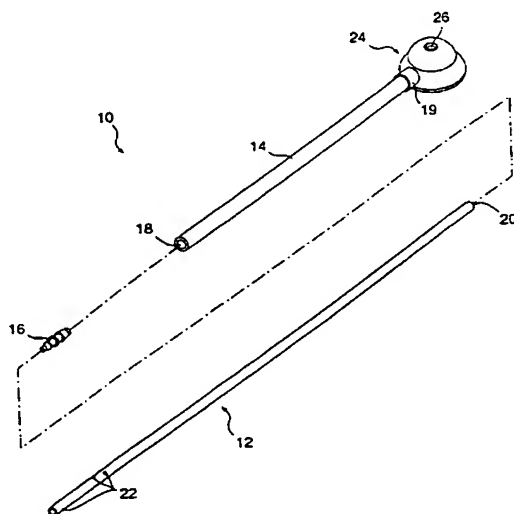
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(57) Abstract

A body lumen access system (10) comprises a distal access cannula (12) and a proximal access cannula (14). The distal access cannula (12) is attached to or within the body lumen, and the proximal access cannula (14) is attached to an implanted port (24), or is transcutaneously positioned and attached to a luer or other external connector (16). The distal and proximal access cannulas are usually implanted separately, cut to length, and attached at a subcutaneous junction location. Preferably, the proximal access cannula (12) has a larger lumen diameter than that of the distal access cannula (12) in order to reduce flow resistance within the cannula system. In some cases the distal and proximal access cannulas may be formed integrally.

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## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US98/00931

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC(6) : A61M 11/00 US CL : 604/93 According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) U.S. : 604/93, 175, 183, 247, 905; 623/1  Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,562,617 (FINCH, Jr. et al.) 08 October 1996, cols. 1-8.	1-77
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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Date of the actual completion of the international search 26 JUNE 1998		Date of mailing of the international search report 14 JUL 1998
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230		Authorized officer <i>N. Kent Gring</i> N. KENT GRING Telephone No. (703) 308-2214

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EP 98 90 3547

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